

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

As a preliminary matter, Applicant notes the Office Action's approval of the drawings filed on December 6, 2001, acknowledgement of Applicant's claim for foreign priority under 35 U.S.C. § 119(a)-(d), receipt of all certified copies of the priority documents and consideration of the Information Disclosure Statement also filed on December 6, 2001.

The title stands objected to for not being descriptive and the specification stands objected to for a minor informality. Claims 4-6, 8, 12-14 and 16 stand rejected under 35 U.S.C. § 112, ¶ 2 as being indefinite. Claims 1, 2, 5, 9, 10 and 13 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 7,209,247 to Iwadata. Claims 6 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Iwadata. Claims 3, 4, 11 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Iwadata in view of U.S. Patent No. 5,845,057 to Takeda et al. (hereinafter "Takeda"). Claims 7, 8, 15 and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Iwadata in view of U.S. Patent Application Publication No. 2005/0024680 to Tanaka.

By this amendment, the title has been amended to be more clearly indicative of the invention to which the claims are directed. The specification has been amended according to the Examiner's helpful suggestion found on page 2 of the Office Action to correct the noted minor informality. Applicant respectfully submits that the title and specification are each in proper form and respectfully requests withdrawal of the outstanding objections. Claims 4, 5, 12 and 13 have been canceled without prejudice to or disclaimer of the subject matter contained therein. The subject matter of canceled claims 4, 5, 12 and 13 has been incorporated into independent claims 2, 1, 10 and 9, respectively. Claims 6, 8, 14 and 16 have been amended to reflect the changes made to the claims from which they depend. Applicant respectfully submits that any ambiguity or indefiniteness issues that may have existed with canceled claims 4, 5, 12 and 13 have been corrected in redrafting independent claims 1, 2, 9 and 10. Thus, Applicant respectfully submits that the claims are definite and satisfy the requirements set forth under 35 U.S.C. § 112, ¶ 2 as being indefinite. An editorial

amendment was made to claim 3, claims 6, 7 and 14 were amended to update their dependence and claim 11 remained unchanged in the application.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier. After amending the claims as set forth above, claims 1-3, 6-11 and 14-16 are now pending in this application for consideration.

Applicant respectfully submits that each of the independent claims is patentably distinguishable over the cited references as required by § 102 and § 103. Applicant further submits that none of the cited references, whether considered alone or in combination, discloses Applicant's claimed image forming apparatus and method including the features, steps and arrangements of: (1) *setting the image forming conditions*; (2) *deciding whether a synchronous control for operating the scanner and the printer synchronously for each page of document images is used or an asynchronous control for operating the scanner and the printer asynchronously is used based on the set image forming conditions when executing the image formation*; and (3) *executing control based on the decided control* as required by independent claims 1 and 9. Applicant further submits that none of the cited references, whether considered alone or in combination, discloses Applicant's claimed image forming apparatus and method including the features, steps and arrangements of: (1) *judging whether the detected error is a solvable error* and (2) *wherein only the operation of the printer is stopped when the error is the solvable error* as required by independent claims 2 and 10. By contrast, the cited references fail to disclose, teach or suggest these claimed features, steps and arrangements. Accordingly, independent claims 1, 2, 9 and 10 and claims dependent therefrom are patentably distinguishable over the cited references. These distinctions will be further described below.

THE CLAIMS DISTINGUISH OVER THE CITED REFERENCES

Rejection Under 35 U.S.C. § 102

Claims 1, 2, 5, 9, 10 and 13 stand rejected as being anticipated by Iwadata. In response, Applicant traverses the rejection and respectfully submits that the claims are allowable at least for the reasons that follow.

Applicant relies on MPEP § 2131, entitled “Anticipation – Application of 35 U.S.C. 102(a), (b), and (e),” which states that a “claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” Section 103 amplifies the meaning of this anticipation standard by pointing out that anticipation requires that the claimed subject matter must be “*identically* disclosed or described” by the prior art reference. (Emphasis added.) It is respectfully submitted that Iwadata does not describe each and every element of any of the claims.

Embodiments of the present invention are directed to an image forming apparatus and method. The image forming apparatus according to independent claim 1 includes a scanner, a printer, an error detector, a controller, means for setting and means for deciding. The scanner reads a document and provides image data corresponding to a document image, while the printer forms an image corresponding to the image data provided from the scanner. The error detector detects an operating error of the scanner and the printer. The controller stops an operation of the device that cause the error and operates the device only that did not cause the error when the error detector detects the operating error.

According to one embodiment of the present invention as recited in amended independent claims 1 and 9, the image forming apparatus and method further includes the features, steps and arrangements of: (1) ***setting the image forming conditions***; (2) ***deciding whether a synchronous control for operating the scanner and the printer synchronously for each page of document images is used or an asynchronous control for operating the scanner and the printer asynchronously is used based on the set image forming conditions when executing the image formation***; and (3) ***executing control based on the decided control***. With these features, steps and arrangements, image forming efficiency can be greatly

improved even if one of the devices (i.e., the printer or the scanner) malfunctions by continuing the operation of the other functioning device (Specification, page 2, lines 1-5 and page 19, lines 1-16). One exemplary embodiment of the present invention is illustrated in FIGS. 5A, 5B and 7 which shows the synchronous control mode whereby image forming conditions stored in a condition setting table correspond to the normal image forming operations (FIG. 5A), the asynchronous control mode whereby the image formation is carried out in a group mode (FIG. 5B) and the system switching from a synchronous control to an asynchronous control, suspending the printer operation and continuing the scanning operation when a correctable error has been detected (FIG. 7). Applicant respectfully submits that the Iwadata reference fails to disclose these claimed features, steps and arrangements as well as the benefits provided.

The Iwadata reference is directed to a multi-function image output apparatus with error control. The Office Action at page 5 equates Iwadata's copy mode key 603 and printer mode key 605 to the claimed means for deciding and references column 6, line 36 through column 7, line 6 as disclosing each of the highlighted features identified above. Applicant respectfully disagrees.

First, Iwadata fails to disclose the claimed synchronous and asynchronous control of the printer and scanner as required by independent claims 1 and 9. There is absolutely no disclosure, teaching or suggestion of Iwadata's system operating in this manner. In Iwadata, the user can select from several functions such as a copy mode, a printer mode and a facsimile mode by selecting either the copy mode key 603, the printer mode key 605 or the facsimile mode key 604. Iwadata, however, never mentions the scanner and printer operating in synchronous control with each other and in asynchronous control with each other as claimed. At best, Iwadata discloses the copying and printing functions operating independent of each other since the user selects from one of the several functions such as a copy mode, a printer mode and a facsimile mode. Thus, Iwadata fails to disclose this claimed feature, step and arrangement.

In addition, Iwadata fails to disclose the synchronous control or the asynchronous control of the scanner and printer being decided based on the *image forming conditions*. In

Iwadata, the user selects one of the plurality of functions and that function is performed. The selected function is not based on the image forming conditions such as density, two side setting, etc. There is nothing in Iwadata that discloses, teaches or suggests the selected function is based on nothing more than the user's selection of that function.

Finally, Iwadata fails to disclose *executing control based on the decided control*. Again with Iwadata, the user selects one of the plurality of functions and that function is performed. There are no other considerations involved when executing the selected function. For anticipation, however, "every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim." *Brown v. 3M*, 60 USPQ2d 1375 (Fed. Cir. 2001). Iwadata fails to disclose each of the features, steps and arrangements of independent claims 1 and 9.

In view of the fact that the Iwadata reference does not disclose each of the claimed features, steps and arrangements indicated above, this reference cannot be said to anticipate nor can it be said to render obvious the invention which is the subject matter of independent claims 1 and 9. Thus, independent claims 1 and 9 are allowable.

Because independent claims 1 and 9 are allowable, claims dependent therefrom, namely claims 6-8 and 14-16 are also allowable by virtue of their direct or indirect dependence from allowable independent claims 1 and 9 and for containing other patentable features. Further remarks regarding the asserted relationship between any of the claims and the cited reference are not necessary in view of their allowability. Applicant's silence as to the Office Action's comments is not indicative of being in acquiescence to the stated grounds of rejection.

The Rejections Under 35 U.S.C. § 103

In the Office Action, claims 3, 4, 11 and 12 stand rejected as being unpatentable over Iwadata in view of Takeda. With respect to independent claims 2 and 10 which have been amended to incorporate the subject matter of canceled claims 4 and 12, respectively, Applicant respectfully traverses the rejections of these claims, and submits that these claims are allowable for at least the following reasons.

The framework for the objective analysis for determining obviousness under §103 requires:

1. Determining the scope and content of the prior art;
2. Ascertaining the differences between the claimed invention and the prior art;
3. Resolving the level of ordinary skill in the pertinent art; and
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Teleflex, Inc. v. KSR Int'l Co., 127 S. Ct. 1727, 82 USPQ2d 1385 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). In order to establish a *prima facie* case of obviousness, all the claim limitations must be taught or suggested by the prior art. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). See MPEP §2143.03.

Missing Recitations from the Prior Art

Embodiments of the present invention are directed to an image forming apparatus and method. The image forming apparatus according to independent claim 2 includes a scanner, a printer, an error detector and a controller. The scanner reads a document and provides image data corresponding to a document image, while the printer forms an image corresponding to the image data provided from the scanner. The error detector detects an operating error of the printer. The controller suspends the operation of the printer and by operating the scanner only, completes the read of the document when an operating error is detected by the error detector.

According to one embodiment of the present invention as recited in amended independent claims 2 and 10, the image forming apparatus and method further includes the features, steps and arrangements of: (1) ***judging whether the detected error is a solvable error*** and (2) ***wherein only the operation of the printer is stopped when the error is the solvable error***. With these features, steps and arrangements, image forming efficiency can be greatly improved even if one of the devices (i.e., the printer or the scanner) malfunctions by continuing the operation of the other functioning device (Specification, page 2, lines 1-5 and page 19, lines 1-16).

The Office Action states on page 8, that the primary reference of Iwadata discloses each of the claimed features except for judging a solvable error and only suspending the printer operation. The Office Action then relies on the Takeda reference to cure this deficiency. Applicant respectfully disagrees. The Takeda reference is directed to a print processing method for a plurality of printing apparatuses connected to a network (Takeda, abstract, lines 1-4). Although Takeda discloses stop printing based on an error code, Takeda fails to disclose, teach or suggest ***judging whether the detected error is a solvable error and wherein only the operation of the printer is stopped when the error is the solvable error.*** Nothing in the passages highlighted in the Office Action mentions judging if an error is solvable and/or stopping only the printing operation when the error is solvable. Takeda is completely silent with respect to these claimed features.

In view of the fact that the cited references, whether considered alone or in combination do not disclose the claimed features indicated above, these references cannot be said to render obvious the invention which is the subject matter of independent claims 2 and 10. Thus, independent claims 2 and 10 are allowable.

Because independent claims 2 and 10 are allowable, claims dependent therefrom are also allowable by virtue of their direct or indirect dependence from allowable independent claims 2 and 10 and for containing other patentable features. Further remarks regarding the asserted relationship between any of the claims and the cited references are not necessary in view of their allowability. Applicant's silence as to the Office Action's comments is not indicative of being in acquiescence to the stated grounds of rejection.

The Level of Ordinary Skill In the Art has Incorrectly Been Ascertained

KSR did not repeal the *Graham v. John Deere Co.* factors - just the opposite, it reaffirmed them. One of those factors is the requirement that the PTO must resolve the level of ordinary skill in the pertinent art. It is respectfully submitted that the PTO presumes a higher level of skill of the ordinary artisan in this art than was actually present at the time of the invention.

The ordinary artisan would not have had a level of skill sufficient to render the invention obvious to that ordinary artisan. Specifically, before the disclosure of the present

invention, the ordinary artisan would not have had the skill to predict that the features of Iwadata could be modified in accordance with Takeda as is asserted in the Office Action. To the contrary, only the innovator would have had the skill necessary to predict such modification. The ordinary artisan would not have had the skills to arrive at the present invention without instruction from the innovator. The Office Action is silent in regard to addressing the requisite *Graham* factors.

Lack of Sufficiently Articulated Rationale to Modify or Combine the References

The Office Action fails to meet the requirement of providing a sufficiently articulated rationale to combine Iwadata and Takeda.

The Supreme Court in *KSR* stated that “a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the art...it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.” *KSR* at 1741. In addition, the Court in *KSR* stated that a reason to combine elements should be made explicit. *Id.* at 1740-41.¹ Indeed, the Court approvingly cited *In re Kahn*, 441 F.3d 977 (Fed. Cir. 2006), for requiring an articulated reason. *Id.* at 1741.²

Iwadata is devoid of any reason why one of skill in the art would incorporate the teachings of Takeda into Iwadata. The Office Action states that it would have been obvious to combine Takeda into Iwadata because doing so would “allow the system to better deal with errors.” Thus, the proffered motivation, even assuming that the underlying results do in fact occur from general implementation of the teachings of Takeda does not mean that the ordinary artisan would have combined the references. Instead, the Office Action all but relies on Applicant’s disclosure for motivation to modify the references to arrive at the claimed

¹ “Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit.” *Id.* at 1740-41.

² “Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness” *Id.* at 1741.

invention, the Office Action citing nothing in the prior art that provides the specific motivation to modify the references to arrive at the invention as claimed.

Thus, the PTO has not properly articulated a reason for why one with ordinary skill in the art would combine the teachings of Iwadata with Takeda. Because the PTO has not provided sufficient reasons to combine the teachings of Iwadata with Takeda, any rejections based on these combinations are improper. Accordingly, the present claims are not rendered unpatentable over the prior art.

Applicant respectfully submits that independent claims 2 and 10 and claims dependent therefrom are patentably distinguishable over the cited references and thus, allowable. Further remarks regarding the asserted relationship between any of the claims and the cited references are not necessary in view of their allowability. Applicant's silence as to the Office Action's comments is not indicative of being in acquiescence to the stated grounds of rejection.

CONCLUSION

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing or a credit card payment form being unsigned, providing incorrect information resulting in a rejected credit card transaction, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

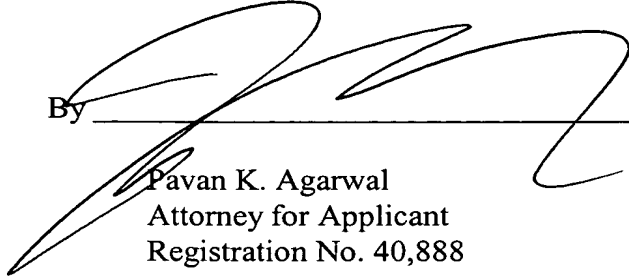
Examiner Guillermy is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

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